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ABSTRACT

This presentation discusses longitudinal results of a home-based program for low SES black and white children whose parents received weekly visits designed to chart children's individualized enrichment when they were from 2 to 5 years of age. The program drew upon school and community resource personnel when appropriate, to provide parents with help on medical and nutritional questions. Approximately one-third of all participating children were identified as having physical, social or emotional needs requiring referrals to at least one community agency. For subjects without physical, social or emotional problems, attention centered on intellectual development. Individualized enrichment was built around an integration of each child's interests and results of periodic diagnostic evaluations obtained through an achievement oriented preschool test. Third grade achievement test scores on the "Iowa Test of Basic Skills" found participating black children outperforming their older and non-Home Start siblings by significantly higher scores on 11 of the "ITBS" subtest measures; no significant differences were obtained with participating white children and their non-program siblings. Results indicate that, especially for black children, home-based preschool enrichment may more effectively promote growth in math and basic skill areas related to Cattell's crystallized intelligence, with more limited enrichment effects in language-linked subject areas such as vocabulary and reading. (Author/RH)

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Home Start:

How a Home-Based Preschool Program Raised Black Achievements

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Expectations from early childhood programs have followed a rollercoaster pattern, marked by exhilarating ups and discouraging downs, since former President Johnson first launched the War on Poverty in 1964. Initial projections were based on the assumption that disadvantaged and minority children would derive long-term benefits through participation in compensatory projects such as Head Start. It was confidently expected that special programs would significantly narrow the achievement gap separating disadvantaged and advantaged, as well as minority and majority, children. Those early hopes have been dashed. Most authorities now agree that it is not nearly as easy to enable students to raise achievements as was once popularly believed.

Much of the current disillusionment concerning early childhood programs stems from the 1968 Westinghouse-Ohio survey of Head Start graduates.[1] This experiment found that Head Start programs, whether they be year-round or summer only projects, failed to produce documentable long-term gains. Jencks' reanalysis of the Westinghouse data revealed that children who participated in the programs of several year-round centers registered gains which persisted into first grade.[2] But beyond that the picture was gloomy. Generally, the findings were remarkably consistent: Head Start did not significantly or substantially alter the prospects for children's later school success.

Previous presentors in this symposium have noted that desegregation, like most preschool endeavors, has not yielded evidence of long-term social or academic gains. In this experimenter's opinion, disappointments with both desegregation

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and preschool programs can be partially attributed to a common cause: the failure to take full advantage of educational contributions which inhere in home-school-community bonds. Ever since the late 1960s, practically all forced busing has required moving children from their natural neighborhoods. The Reverend Joseph Lara, a Chicano leader and staunch busing proponent, admits that because of mandated desegregation many schools have become alien places for minority students and that problems recur despite efforts to smooth the transition from natural school and community to a distant school and community.[3] Similarly, many preschool programs give lip service to the child's total environment but end up ignoring resources and problems within home and community. Consequently, there is considerable disparity between services given many young children and what they actually need. This is often true even when preschool teachers recognize that a child's learning problem is directly linked to home or community factors. Today I should like to summarize longitudinal results concerning achievement profiles of the first group of Home Start (HS) children. We have traced the growth trend of these children over nearly a seven year period. The results are not as dramatic as we might wish, but they are decidedly encouraging.

THE HOME START PROJECT

Black and white children were enrolled in this family-based program when they were two years of age; they continued in project until they were five. Home visitors made hourly visits, once a week, in the child's home. In these visits the paraprofessional home workers conferred with the parents or parental surrogates concerning family interaction. Focus was given to what the child had been doing in the home, questions that any family member might have with respect to what the child was doing, how books and toys could be appropriately

selected and made available. A large inventory of toys and books was maintained and parents were encouraged to visit the storeroom and check out materials.

Content and process of the home workers' parental contacts were assessed in weekly staff meetings attended by the following professional HS staff: The director who was a trained professional teacher, psychologist, consultant, nurse, speech and language consultant, social worker, and certified preschool and early elementary school teacher. In staff meetings, issues concerning children's development were raised and questions were entertained as to whether a professional HS member should become involved in the home to assess the feasibility of referral to a community agency.

Regular in-service training proved to be essential. Some sessions focused on understanding typical and atypical development, assessing intra-child variability through test and nontest techniques, interviewing techniques, working with parents and collaborating with colleagues (both in the program and in other community agencies) to assure an effective team effort. The training sessions also assessed content and process of the paraprofessional home workers' parental contacts. One key training element involved determining if parents wished a professional HS member to become involved in the home to assess the feasibility of referral to a community agency. Parental involvement was a project priority in addition to home visits; parent cluster groups met to discuss issues of interest such as discipline, communication with teachers, TV, and nutrition.

One set of objectives dealt with handicapped children. About one-third of all participating children were identified as being either physically or mentally handicapped, and their parents were referred to a community agency. Most of the children referred were considered multiply handicapped. Referrals included

children who were emotionally disturbed, crippled or mentally retarded, or who had handicaps in hearing, vision or speech.

Individualized enrichment drew upon the theories of Jean Piaget[4] and Eleanor Gibson.[5] For each child, ongoing diagnosis was provided throughout the years of program participation with strategies built around an integration of each child's interests and of diagnostic results obtained through an achievement-oriented preschool test, the Iowa Tests of Preschool Development. The test was administered by paraprofessionals at 6-month intervals and contains four subtests (language, visual motor, memory and concepts). After each testing, a report was prepared by the school psychologist and sent to the Home Start director. The report suggested various types of activities as appropriate for the child. The director discussed the results with the home worker and any professional member of the staff who was working with the family.

The year prior to kindergarten admission, in addition to continuing and regular home visits, the children also received an academic year of prekindergarten enrichment, 2½ hours a day, 5 days a week. The teacher was a college graduate, with a major in lower elementary education. Early in the prekindergarten year, the children were given the Learning Reading System Seriation Test and each child's performance on this test's five factors was assessed to formulate individualized learning strategies.[6]

Population Served

Subject selection for the initial three year cycle was initiated during the summer of 1968, when census tract cards were employed to identify parents of all children 1) who resided in the four target attendance centers designated by the Office of Economic Opportunity as socioeconomically disadvantaged and from which participants for the program were drawn, and 2) who were eligible to

attend kindergarten in the fall of 1971. The program director conferred with community agencies to increase the likelihood of including in the program new arrivals to the city.

Results of Participation: Achievement Trends

The parents of 89 children (51 black, 38 white) originally applied for admission into HS and all were accepted. When the youngsters reached third grade it was possible to locate 31 (22 black, 9 white) of them who had older and non-HS siblings whose test scores could be compared with attainments of their HS siblings.[7] Mann Whitney U Tests revealed no difference in first-grade scores on the Tests of Primary Mental Abilities of the HS subjects who could not be located and the 31 subjects employed in this study.

Procedure

Subjects' grade equivalence scores on the Iowa Tests of Basic Skills (ITBS) were compared, using Iowa State norms rather than the somewhat lower national norms.[8] The HS subjects were group-administered the ITBS during the last week of September and the first week of October when their normative or expected Iowa state grade equivalence was 3.2. Six HS subjects had transferred to other schools, as had their older siblings who in prior years had been given the ITBS. Some of these subjects took the ITBS as late as January 10. It was therefore necessary to adjust the ITBS scores of these six subjects according to the month in which they were given the ITBS. Adjustment procedures for these subjects were as follows: Each child's actual grade placement was computed, assuming .1 of an academic year's progress would normally be made for each school month. Actual expected grade placement was divided by the grade equivalence secured on each ITBS measure, which was multiplied by the expected grade equivalence when the majority of subjects and their older siblings had taken the ITBS (3.2). For example, the last child included in the experiment took the ITBS on January 10

and on one ITBS measure received a grade equivalence of 1.8. Adjustment of the grade equivalence score was computed as follows:

$$\frac{1.8 \text{ (actual achievement)}}{3.5 \text{ (expected or usual achievement)}} \times 3.2 \text{ (expected achievement, based on time of year majority of subjects took the ITBS)} = 1.6 \text{ (adjusted grade equivalence score)}$$

Significance of differences between performance of HS subjects and their older siblings was assessed through the nonparametric Wilcoxon matched-pairs signed-ranks test, which is applicable where the samples are related.[9] This procedure calculates the differences between each pair. Differences are then ranked without regard to sign; the smallest difference a rank of 2, etc. Probability level of program effects is estimated through resulting z-scores.

Results and Discussion

Table 1 presents the grade equivalences and z-scores secured for both black and white HS subjects and their siblings. Significant differences for all subjects are noted in Capitalization, Total Language, Total Word Study, Math Concepts, Math Problems, and Total Math. Ethnic-related significant differences are observed only with respect to black subjects and on the following measures: Spelling, Usage, Total Language, Maps, Graphs, Reference, Total Word Study, Math Concepts, Math Problems, Total Math, and Composite ITBS. The largest single difference occurs in Math Problems, in which black HS subjects' scores average 1.2 grade equivalences above those of their older and non-HS siblings. Table 1 also shows that there are no significant differences with white subjects on any ITBS measure. This is consistent with earlier indications that HS promoted more learning of black than of white participants.[10] However, on all 15 ITBS measures the normal probability distribution function for z showed a smaller positive tail, revealing a trend for HS whites to attain generally higher positions in the rank ordering than their siblings.

Table 1

Comparison of Third-Grade Achievement Scores (in Grade Equivalences), HS Subjects and Their Older, Non-Home Start, Siblings (Employing Wilcoxon Matched-Pairs Signed-Ranks Test)

	Black Subjects (N = 22)		White Subjects (N = 9)		Black and White Subjects (N = 31)	
	Mean grade equivalence		Mean grade equivalence		Mean grade equivalence	
	Home Start	Non-Home Start	Home Start	Non-Home Start	Home Start	Non-Home Start
Vocabulary	2.4	2.6	2.8	2.9	2.5	2.7
Reading	2.2	2.4	3.0	2.9	2.5	2.5
Spelling	2.6	2.6	2.9	2.7	2.6	2.6
Capitalization	2.8*	1.7	3.4	2.7	3.0*	2.0
Punctuation	2.3	2.3	2.5	2.9	2.4	2.5
Usage	2.2*	1.9	2.9	2.8	2.4	2.2
Total Language	2.3*	1.9	2.6	2.7	2.4*	2.1
Maps	2.6*	1.8	2.7	2.7	2.7	2.1
Graphs	2.7*	2.1	2.9	2.7	2.8	2.3
Reference	2.8*	2.0	3.6	3.1	3.0	2.3
Total Word Study	2.7**	1.8	2.7	2.9	2.7*	2.1
Concepts	2.8**	2.3	3.1	3.3	2.9*	2.6
Problems	2.9**	1.7	3.1	3.0	2.9**	2.1
Total Mathematics	2.7**	1.8	3.1	3.1	2.8**	2.2
Composite	2.3*	1.9	2.9	3.0	2.4	2.2

*$p < .05$
**$p < .01$

These results indicate that a comprehensive preschool program can enable minority children to achieve significantly higher academic performance well into third grade. Results must be qualified in view of the small numbers of children involved. Moreover, the experimenter is aware that intra-community or intra-school factors, often of a political nature, may act to disrupt program continuity and support. In retrospect, it appears that the success of the project may be largely attributed to five significant factors: (1) the steady emphasis given to cooperation of home, school and community (2) educational advantages of a cohesive program which spans the critical period from two to five years of age (3) deliberate efforts taken to identify handicapped children and to provide them with appropriate supportive services (4) ongoing diagnoses which were not limited to the preschool child, but extended to all members of the family and which retained sufficient flexibility for ongoing modification of individual strategies and (5) disciplined staff competencies which were enhanced by sequential and sometimes individualized in-service training.

References

1. The Impact of Head Start. Columbus, Ohio: Westinghouse Learning Corporation, 1968.

2. Jencks, Christopher, et al. Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books, 1972.

3. Integrated Education, March-April, 1978, Vol. 16(2), p.28.

4. Inhelder, B., and Piaget, J. The Early Growth of Logic in the Child. New York: Harper & Row, Publishers, 1964.

5. Gibson, E. "Learning to Read." Science. 1965, Vol. 148, No. 3673, 1066-72.

6. Scott, R., Dunbar, A., and Nelson, J. LRS Seriation Test. New York: Harper & Row, 1968.

7. Scott, R. "Home Start: Third grade follow-up assessment of a family-centered preschool program. Psychology in the Schools, October, 1976, Vol. 13(4).

8. Hieronymus, A. and Linquist, E. Manual for administrators, supervisors and counselors: Iowa Tests of Basic Skills (Forms 5 and 6). Boston: Houghton Mifflin, 1974, 53-55.

9. Bruning, J. and Kintz, B. Computational handbook of statistics. Glenview: Scott, Foresman, 1968.

10. Scott, R. Home Start: Follow-up assessment of a family-centered preschool enrichment program. Psychology in the Schools, 1974, 11, 147-149.